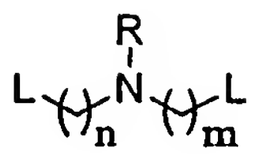
We claim:

1. A compound represented by **A**:



A

wherein

R is H, alkyl, hydroxyalkyl, alkoxyalkyl, aminoalkyl, thioalkyl, alkenyl, alkynyl, aryl, heteroaryl, aralkyl, heteroaralkyl, acyl, aminoacyl, hydroxyacyl, thioacyl, $-CO_2H$, $-(CH_2)_d-R_{80}$, or an amino acid radical;

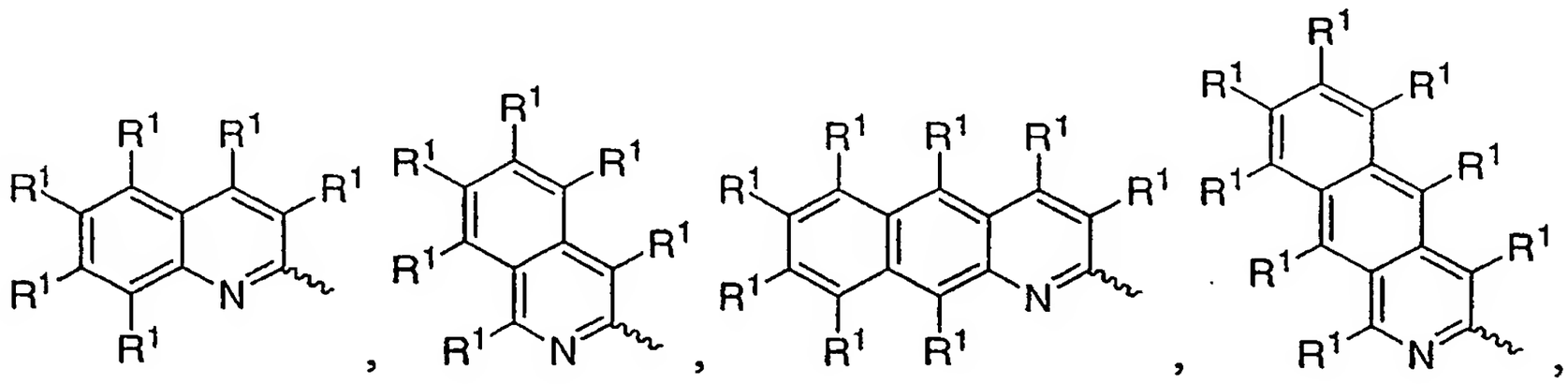
R_{80} is independently for each occurrence carboxaldehyde, carboxylate, carboxamido, alkoxycarbonyl, aryloxycarbonyl, ammonium, aryl, heteroaryl, cycloalkyl, cycloalkenyl, heterocyclyl, polycyclyl, amino acid, peptide, saccharide, ribonucleic acid, (deoxy)ribonucleic acid, or a ligand for a G-protein-coupled receptor;

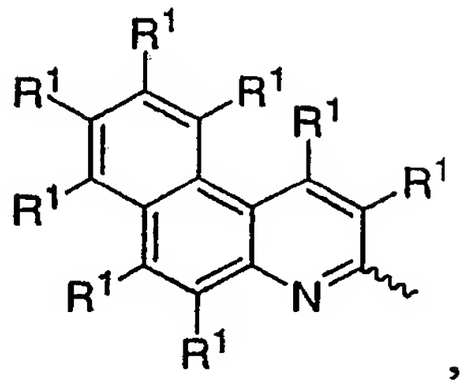
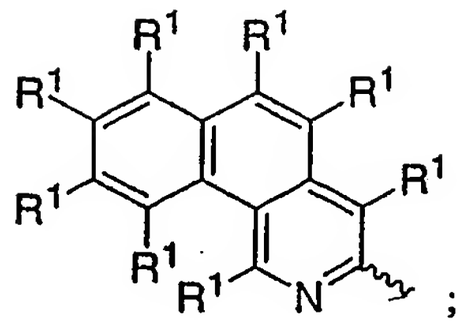
d is an integer in the range 0 to 12 inclusive;

m is an integer in the range 0 to 6 inclusive;

n is an integer in the range 0 to 6 inclusive;

L is independently for each occurrence selected from the group consisting of



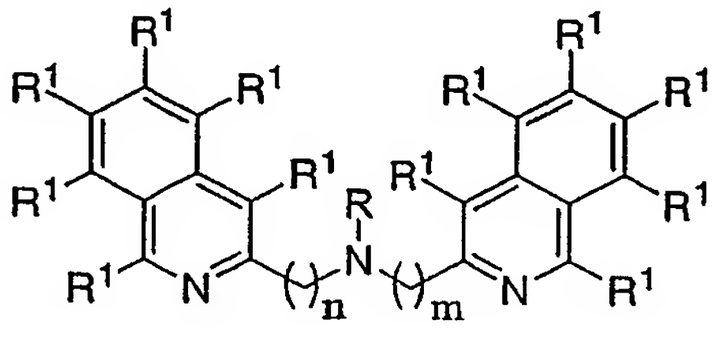

, and 
; and

each instance of R^1 is selected independently from the group consisting of halogen, alkyl, alkenyl, alkynyl, hydroxyl, alkoxyl, acyl, acyloxy, acylamino, silyloxy, amino, nitro, sulfhydryl, alkylthio, imino, amido, phosphoryl, phosphonate, phosphine, carbonyl, carboxyl, carboxamide, anhydride, silyl, thioalkyl, alkylsulfonyl, arylsulfonyl, selenoalkyl, ketone, aldehyde, ester, heteroalkyl, cyano, guanidine, amidine, acetal, ketal, amine oxide, aryl, heteroaryl, aralkyl, heteroaralkyl, azido, aziridine, carbamoyl, epoxide, hydroxamic acid, imide, oxime, sulfonamide, thioamide, thiocarbamate, urea, thiourea, and $-(CH_2)_d-R_{80}$.

2. The compound of claim 1, wherein said compound is complexed with a radionuclide.

3. The compound of claim 1, wherein said compound is complexed with a radionuclide, wherein said radionuclide is technetium or rhenium.

4. A compound represented by **B**:



B

wherein

R is H, alkyl, hydroxyalkyl, alkoxyalkyl, aminoalkyl, thioalkyl, alkenyl, alkynyl, aryl, heteroaryl, aralkyl, heteroaralkyl, acyl, aminoacyl, hydroxyacyl, thioacyl, $-CO_2H$, $-(CH_2)_d-R_{80}$, or an amino acid radical;

each instance of R^1 is selected independently from the group consisting of halogen, alkyl, alkenyl, alkynyl, hydroxyl, alkoxyl, acyl, acyloxy, acylamino, silyloxy, amino, nitro,

sulfhydryl, alkylthio, imino, amido, phosphoryl, phosphonate, phosphine, carbonyl, carboxyl, carboxamide, anhydride, silyl, thioalkyl, alkylsulfonyl, arylsulfonyl, selenoalkyl, ketone, aldehyde, ester, heteroalkyl, cyano, guanidine, amidine, acetal, ketal, amine oxide, aryl, heteroaryl, aralkyl, heteroaralkyl, azido, aziridine, carbamoyl, epoxide, hydroxamic acid, imide, oxime, sulfonamide, thioamide, thiocarbamate, urea, thiourea, and $-(CH_2)_d-R_{80}$;

R_{80} is independently for each occurrence carboxaldehyde, carboxylate, carboxamido, alkoxycarbonyl, aryloxycarbonyl, ammonium, aryl, heteroaryl, cycloalkyl, cycloalkenyl, heterocyclyl, polycyclyl, amino acid, peptide, saccharide, ribonucleic acid, (deoxy)ribonucleic acid, or a ligand for a G-protein-coupled receptor;

d is an integer in the range 0 to 12 inclusive;

m is an integer in the range 0 to 6 inclusive; and

n is an integer in the range 0 to 6 inclusive.

5. The compound of claim 4, wherein said compound is complexed with a radionuclide.

6. The compound of claim 4, wherein said compound is complexed with a radionuclide, wherein said radionuclide is technetium or rhenium.

7. The compound of claim 4, wherein m is 1.

8. The compound of claim 4, wherein n is 1.

9. The compound of claim 4, wherein m is 1; and n is 1.

10. The compound of claim 4, wherein R^1 is hydrogen.

11. The compound of claim 4, wherein m is 1; n is 1; and R^1 is hydrogen.

12. The compound of claim 4, wherein R is $-(CH_2)_d-R_{80}$.

13. The compound of claim 4, wherein m is 1; n is 1; R^1 is hydrogen; and R is $-(CH_2)_d-R_{80}$.

14. The compound of claim 4, wherein m is 1; n is 1; R^1 is hydrogen; and R is $-(CH_2)_d-R_{80}$; wherein said compound is complexed with a radionuclide.

15. The compound of claim 4, wherein m is 1; n is 1; R^1 is hydrogen; and R is $-(CH_2)_d-R_{80}$;

wherein said compound is complexed with a radionuclide, wherein said radionuclide is technetium or rhenium.

16. The compound of claim 4, wherein R is an amino acid radical.

17. The compound of claim 4, wherein R is an amino acid radical; m is 1; and n is 1.

18. The compound of claim 4, wherein R is an amino acid radical; m is 1; n is 1; and R^1 is hydrogen.

19. The compound of claim 4, wherein R is an amino acid radical; m is 1; n is 1; R^1 is hydrogen; wherein said compound is complexed with a radionuclide.

20. The compound of claim 4, wherein R is an amino acid radical; m is 1; n is 1; R^1 is hydrogen; wherein said compound is complexed with a radionuclide, wherein said radionuclide is technetium or rhenium.

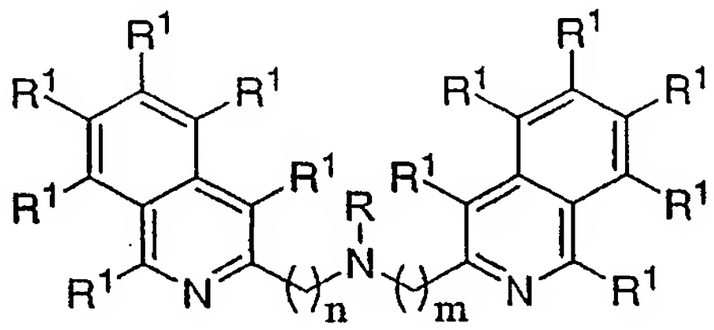
21. The compound of claim 4, wherein the amino acid radical is $-CH_2CH_2CH_2CH_2CH(NH_2)CO_2H$.

22. The compound of claim 4, wherein the amino acid radical is $-CH(CO_2H)CH_2CH_2CH_2CH_2NH_2$.

23. The compound of claim 4, wherein the amino acid radical is $-CH_2CH_2CO_2H$.

24. The compound of claim 4, wherein the amino acid radical is $-CH(CO_2H)(CH_2)_xCH(NH_2)CO_2H$, wherein x is an integer from 3 to 9 inclusively.

25. A compound represented by **B**:



B

wherein

R is $-CH_2CH_2CH_2CH_2CH(NH_2)CO_2H$;

m is 1;

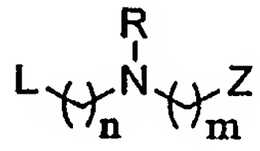
n is 1;

R^1 is hydrogen;

said compound is complexed with a radionuclide; and

said radionuclide is technetium or rhenium.

26. A compound represented by C:



C

wherein

R is H, alkyl, hydroxyalkyl, alkoxyalkyl, aminoalkyl, thioalkyl, alkenyl, alkynyl, aryl, heteroaryl, aralkyl, heteroaralkyl, acyl, aminoacyl, hydroxyacyl, thioacyl, $-CO_2H$, $-(CH_2)_d-R_{80}$, or an amino acid radical;

R_{80} is independently for each occurrence carboxaldehyde, carboxylate, carboxamido, alkoxycarbonyl, aryloxycarbonyl, ammonium; aryl, heteroaryl, cycloalkyl, cycloalkenyl, heterocyclyl, polycyclyl, amino acid, peptide, saccharide, ribonucleic acid, (deoxy)ribonucleic acid, or a ligand for a G-protein-coupled receptor;

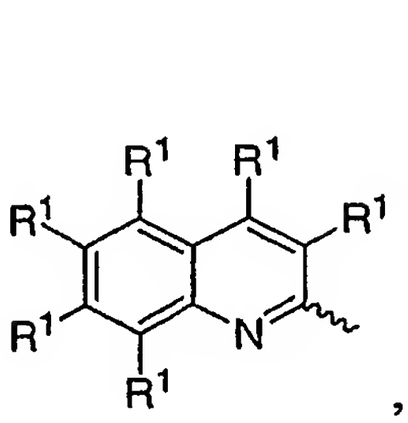
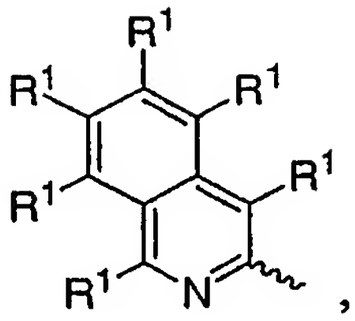
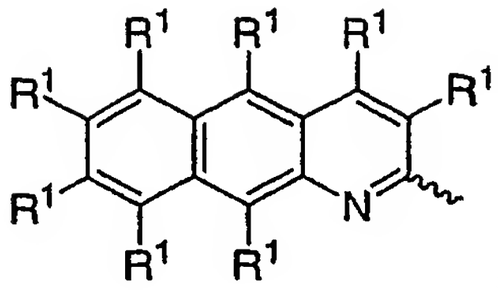
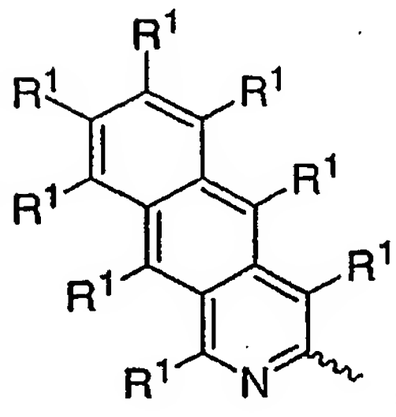
d is an integer in the range 0 to 12 inclusive;

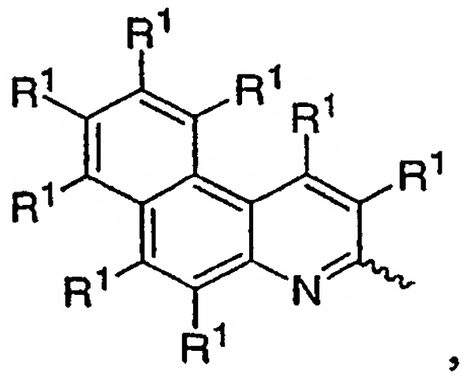
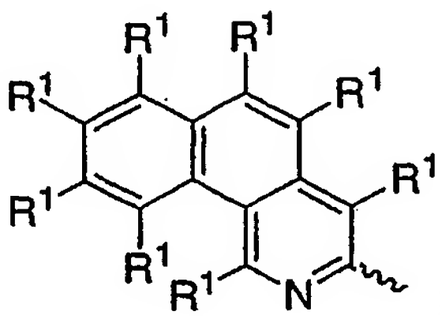
m is an integer in the range 0 to 6 inclusive;

n is an integer in the range 0 to 6 inclusive;

Z is thioalkyl, carboxylate, 2-(carboxy)aryl, 2-(carboxy)heteroaryl, 2-(hydroxy)aryl, 2-(hydroxy)heteroaryl, 2-(thiol)aryl, or 2-(thiol)heteroaryl; and

L is selected from the group consisting of

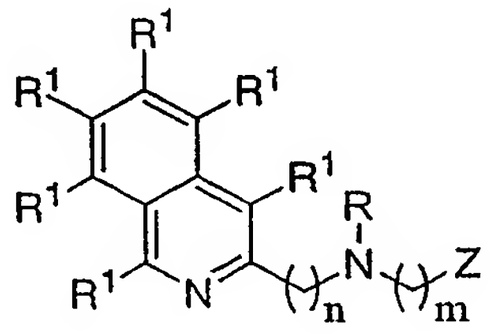

, and

; and

each instance of R^1 is selected independently from the group consisting of halogen, alkyl, alkenyl, alkynyl, hydroxyl, alkoxyl, acyl, acyloxy, acylamino, silyloxy, amino, nitro, sulfhydryl, alkylthio, imino, amido, phosphoryl, phosphonate, phosphine, carbonyl, carboxyl, carboxamide, anhydride, thioalkyl, alkylsulfonyl, arylsulfonyl, selenoalkyl, ketone, aldehyde, ester, heteroalkyl, cyano, guanidine, amidine, acetal, ketal, amine oxide, aryl, heteroaryl, aralkyl, heteroaralkyl, azido, aziridine, carbamoyl, epoxide, hydroxamic acid, imide, oxime, sulfonamide, thioamide, thiocarbamate, urea, thiourea, and $-(CH_2)_d-R_{80}$.

27. The compound of claim 26, wherein said compound is complexed with a radionuclide.

28. The compound of claim 26, wherein said compound is complexed with a radionuclide, wherein said radionuclide is technetium or rhenium.

29. A compound represented by **D**:



D

wherein

R is H, alkyl, hydroxyalkyl, alkoxyalkyl, aminoalkyl, thioalkyl, alkenyl, alkynyl, aryl, heteroaryl, aralkyl, heteroaralkyl, acyl, aminoacyl, hydroxyacyl, thioacyl, $-CO_2H$, $-(CH_2)_d-R_{80}$, or an amino acid radical;

R_{80} is independently for each occurrence carboxaldehyde, carboxylate, carboxamido, alkoxycarbonyl, aryloxycarbonyl, ammonium, aryl, heteroaryl, cycloalkyl, cycloalkenyl, heterocyclyl, polycyclyl, amino acid, peptide, saccharide, ribonucleic acid, (deoxy)ribonucleic acid, or a ligand for a G-protein-coupled receptor;

d is an integer in the range 0 to 12 inclusive;

m is an integer in the range 0 to 6 inclusive;

n is an integer in the range 0 to 6 inclusive;

Z is thioalkyl, carboxylate, 2-(carboxy)aryl, 2-(carboxy)heteroaryl, 2-(hydroxy)aryl, 2-(hydroxy)heteroaryl, 2-(thiol)aryl, or 2-(thiol)heteroaryl; and

each instance of R^1 is selected independently from the group consisting of halogen, alkyl, alkenyl, alkynyl, hydroxyl, alkoxyl, acyl, acyloxy, acylamino, silyloxy, amino, nitro, sulfhydryl, alkylthio, imino, amido, phosphoryl, phosphonate, phosphine, carbonyl, carboxyl, carboxamide, anhydride, silyl, thioalkyl, alkylsulfonyl, arylsulfonyl, selenoalkyl, ketone, aldehyde, ester, heteroalkyl, cyano, guanidine, amidine, acetal, ketal, amine oxide, aryl, heteroaryl, aralkyl, heteroaralkyl, azido, aziridine, carbamoyl, epoxide, hydroxamic acid, imide, oxime, sulfonamide, thioamide, thiocarbamate, urea, thiourea, and $-(CH_2)_d-R_{80}$.

30. The compound of claim 29, wherein said compound is complexed with a radionuclide.

31. The compound of claim 29, wherein said compound is complexed with a radionuclide, wherein said radionuclide is technetium or rhenium.

32. The compound of claim 29, wherein Z is carboxylate.

33. The compound of claim 29, wherein m is 1.

34. The compound of claim 29, wherein n is 1.

35. The compound of claim 29, wherein m is 1; and n is 1.

36. The compound of claim 29, wherein Z is carboxylate; m is 1; and n is 1.

37. The compound of claim 29, wherein R^1 is hydrogen.

38. The compound of claim 29, wherein Z is carboxylate; m is 1; n is 1; and R^1 is hydrogen.

39. The compound of claim 29, wherein R is $-(CH_2)_d-R_{80}$.

40. The compound of claim 29, wherein Z is carboxylate; m is 1; n is 1; R^1 is hydrogen; and R is $-(CH_2)_d-R_{80}$.

41. The compound of claim 29, wherein Z is carboxylate; m is 1; n is 1; R^1 is hydrogen; and R is $-(CH_2)_d-R_{80}$; wherein said compound is complexed with a radionuclide.

42. The compound of claim 29, wherein Z is carboxylate; m is 1; n is 1; R^1 is hydrogen; and R is $-(CH_2)_d-R_{80}$; wherein said compound is complexed with a radionuclide, wherein said radionuclide is technetium or rhenium.

43. The compound of claim 29, wherein R is an amino acid radical.

44. The compound of claim 29, wherein R is an amino acid radical; m is 1; and n is 1.

45. The compound of claim 29, wherein R is an amino acid radical; m is 1; n is 1; and R^1 is hydrogen.

46. The compound of claim 29, wherein R is an amino acid radical; m is 1; n is 1; and R^1 is hydrogen; wherein said compound is complexed with a radionuclide.

47. The compound of claim 29, wherein R is an amino acid radical; m is 1; n is 1; and R^1 is hydrogen; wherein said compound is complexed with a radionuclide, wherein said radionuclide is technetium or rhenium.

48. The compound of claim 29, wherein the amino acid radical is $-CH_2CH_2CH_2CH_2CH(NH_2)CO_2H$.

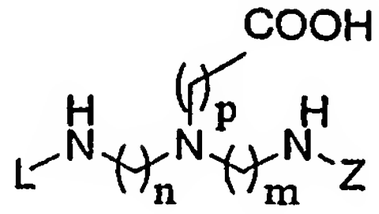
49. The compound of claim 29, wherein the amino acid radical is $-CH(CO_2H)CH_2CH_2CH_2CH_2NH_2$.

50. The compound of claim 29, wherein the amino acid radical is $-CH_2CH_2CO_2H$.

51. The compound of claim 29, wherein the amino acid radical is

-$CH(CO_2H)(CH_2)_xCH(NH_2)CO_2H$, wherein x is an integer from 3 to 9 inclusively.

52. A compound represented by **E**:



E

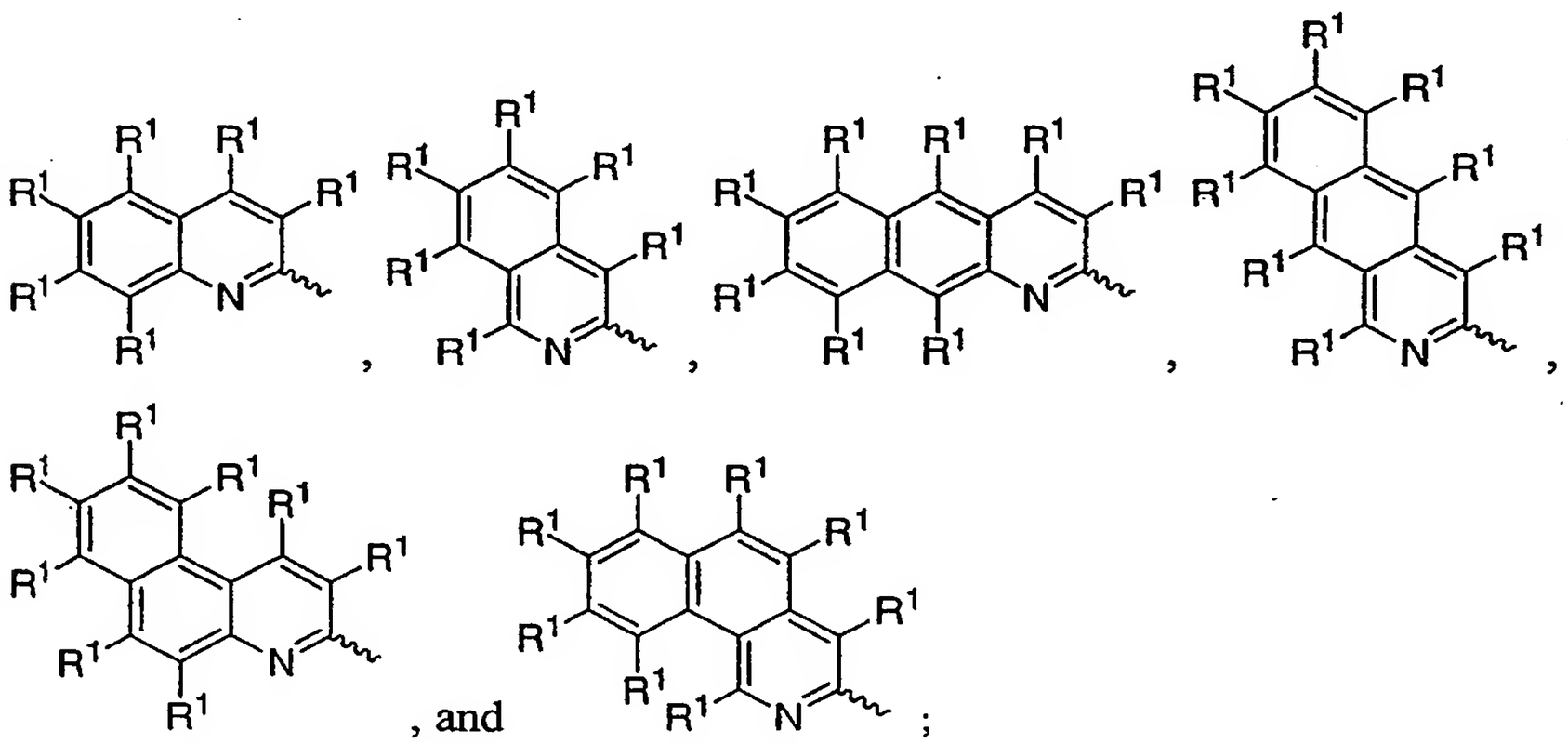
wherein

m is an integer in the range 0 to 6 inclusive;

n is an integer in the range 0 to 6 inclusive;

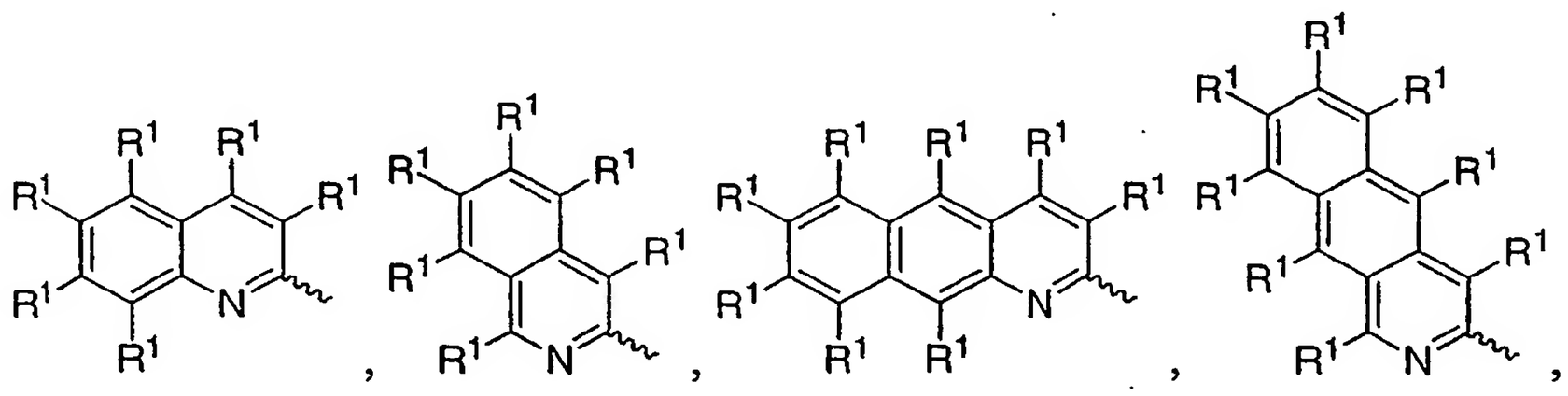
p is an integer in the range of 1 to 10 inclusive;

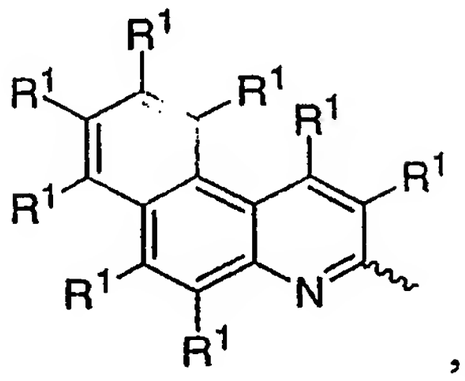
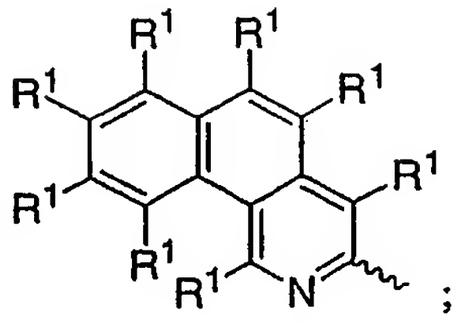
Z is selected from the group consisting of $-CH_2COOH$, alkyl, aryl, aralkyl,



, and ;

L is selected from the group consisting of




, and 
;

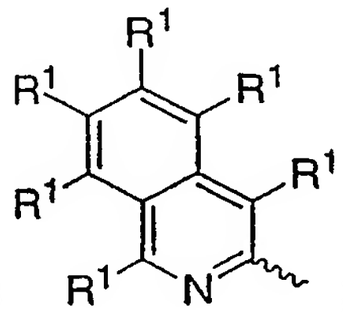
each instance of R^1 is selected independently from the group consisting of halogen, alkyl, alkenyl, alkynyl, hydroxyl, alkoxyl, acyl, acyloxy, acylamino, silyloxy, amino, nitro, sulfhydryl, alkylthio, imino, amido, phosphoryl, phosphonate, phosphine, carbonyl, carboxyl, carboxamide, anhydride, silyl, thioalkyl, alkylsulfonyl, arylsulfonyl, selenoalkyl, ketone, aldehyde, ester, heteroalkyl, cyano, guanidine, amidine, acetal, ketal, amine oxide, aryl, heteroaryl, aralkyl, heteroaralkyl, azido, aziridine, carbamoyl, epoxide, hydroxamic acid, imide, oxime, sulfonamide, thioamide, thiocarbamate, urea, thiourea, and $-(CH_2)_d-R_{80}$;

R_{80} represents independently for each occurrence carboxaldehyde, carboxylate, carboxamido, alkoxycarbonyl, aryloxycarbonyl, ammonium, aryl, heteroaryl, cycloalkyl, cycloalkenyl, heterocyclyl, polycyclyl, amino acid, peptide, saccharide, ribonucleic acid, (deoxy)ribonucleic acid, or a ligand for a G-protein-coupled receptor; and

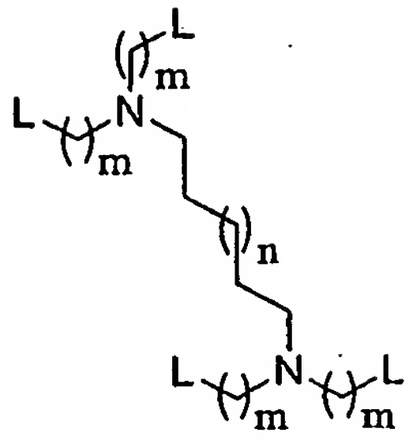
d is an integer in the range 0 to 12 inclusive.

53. The compound of claim 49, wherein said compound is complexed with a radionuclide.

54. The compound of claim 49, wherein said compound is complexed with a radionuclide, wherein said radionuclide is technetium or rhenium.

55. The compound of claim 49, wherein L is 
; R^1 is hydrogen; and Z is alkyl.

56. A compound represented by F:



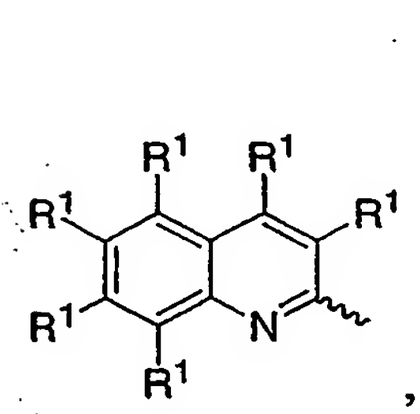
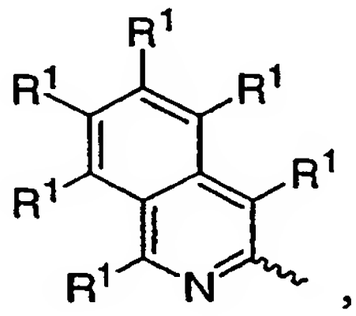
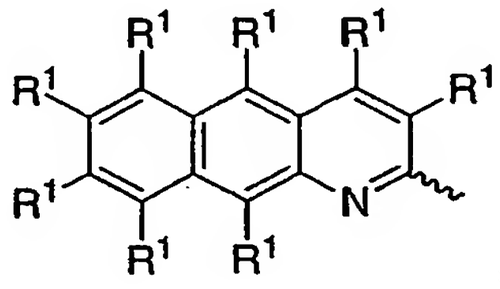
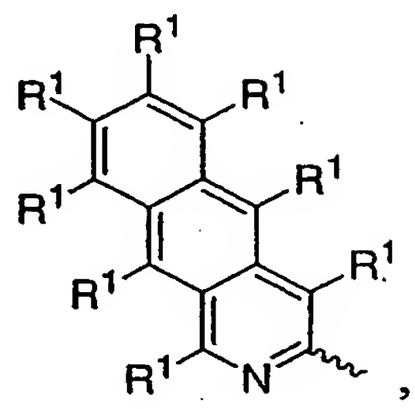
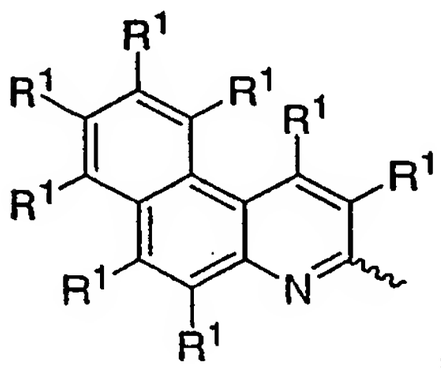
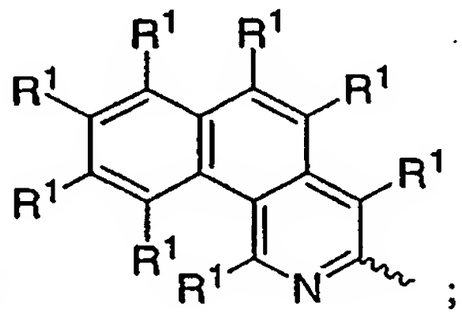
F

wherein

m is independently for each occurrence an integer in the range 0 to 6 inclusive;

n is an integer in the range 0 to 6 inclusive;

L is independently for each occurrence selected from the group consisting of


,

,

,

,

, and

;

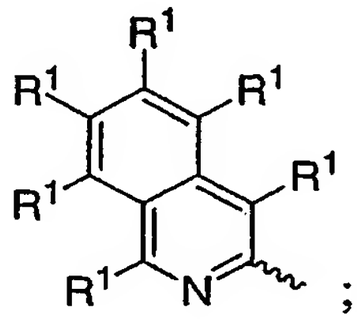
each instance of R^1 is selected independently from the group consisting of halogen, alkyl, alkenyl, alkynyl, hydroxyl, alkoxyl, acyl, acyloxy, acylamino, silyloxy, amino, nitro, sulfhydryl, alkylthio, imino, amido, phosphoryl, phosphonate, phosphine, carbonyl, carboxyl, carboxamide, anhydride, silyl, thioalkyl, alkylsulfonyl, arylsulfonyl, selenoalkyl, ketone, aldehyde, ester, heteroalkyl, cyano, guanidine, amidine, acetal, ketal, amine oxide, aryl, heteroaryl, aralkyl, heteroaralkyl, azido, aziridine, carbamoyl, epoxide, hydroxamic acid, imide, oxime, sulfonamide, thioamide, thiocarbamate, urea, thiourea, and $-(CH_2)_d-R_{80}$;

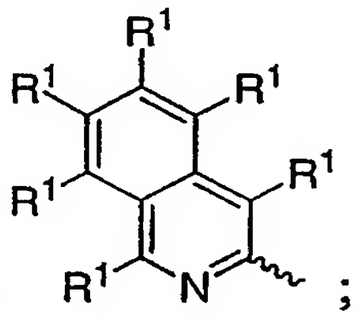
R_{80} is independently for each occurrence carboxaldehyde, carboxylate, carboxamido, alkoxycarbonyl, aryloxycarbonyl, ammonium, aryl, heteroaryl, cycloalkyl, cycloalkenyl, heterocyclyl, polycyclyl, amino acid, peptide, saccharide, ribonucleic acid, (deoxy)ribonucleic acid, or a ligand for a G-protein-coupled receptor; and

d is an integer in the range 0 to 12 inclusive.

57. The compound of claim 56, wherein m is 1.

58. The compound of claim 56, wherein n is 1.

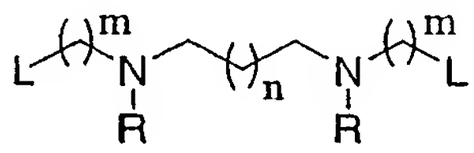
59. The compound of claim 56, wherein L is  ; and R^1 is hydrogen.

60. The compound of claim 56, wherein L is  ; R^1 is hydrogen, m is 1; and n is 1.

61. The compound of claim 56, wherein said compound is complexed with a radionuclide.

62. The compound of claim 56, wherein said compound is complexed with a radionuclide, wherein said radionuclide is technetium or rhenium.

63. A compound represented by **G**:



G

wherein

R is H, alkyl, hydroxyalkyl, alkoxyalkyl, aminoalkyl, thioalkyl, alkenyl, alkynyl, aryl, heteroaryl, aralkyl, heteroaralkyl, acyl, aminoacyl, hydroxyacyl, thioacyl, $-CO_2H$, $-(CH_2)_d-R_{80}$, or an amino acid radical;

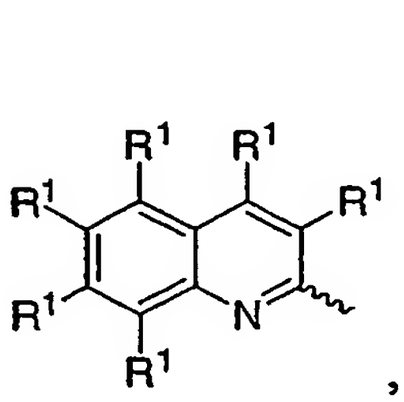
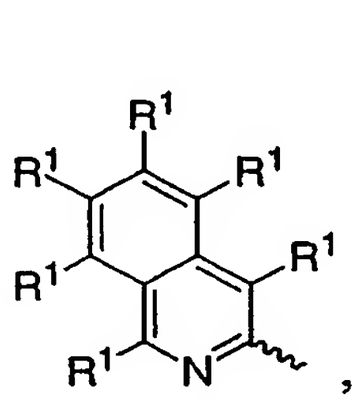
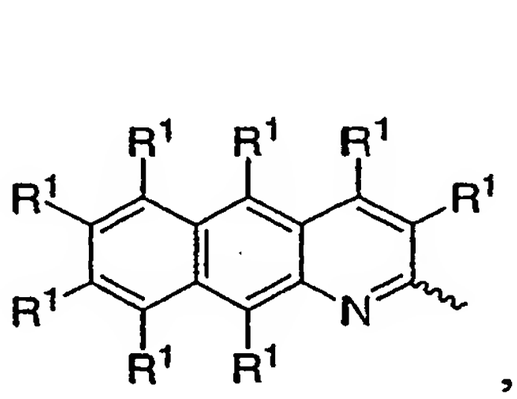
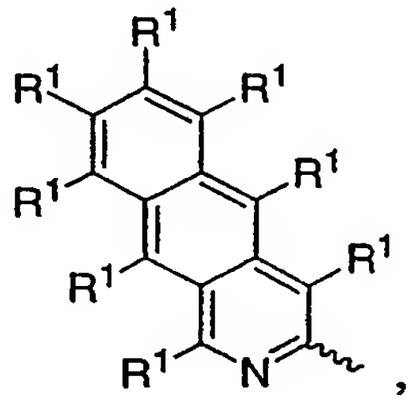
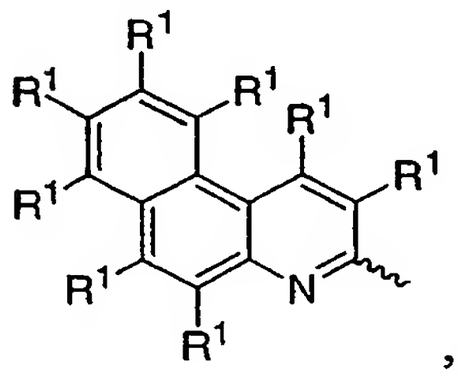
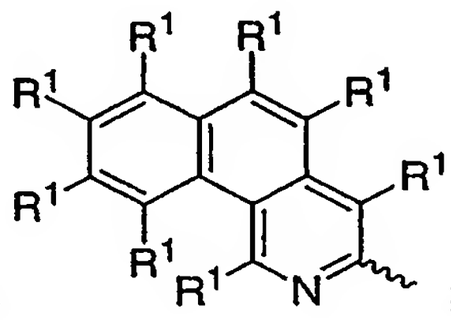
R_{80} is independently for each occurrence carboxaldehyde, carboxylate, carboxamido, alkoxycarbonyl, aryloxycarbonyl, ammonium, aryl, heteroaryl, cycloalkyl, cycloalkenyl, heterocyclyl, polycyclyl, amino acid, peptide, saccharide, ribonucleic acid, (deoxy)ribonucleic acid, or a ligand for a G-protein-coupled receptor;

d is an integer in the range 0 to 12 inclusive;

m is independently for each occurrence an integer in the range 0 to 6 inclusive;

n is an integer in the range 0 to 6 inclusive;

L is independently for each occurrence selected from the group consisting of

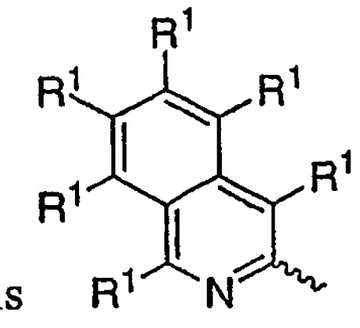







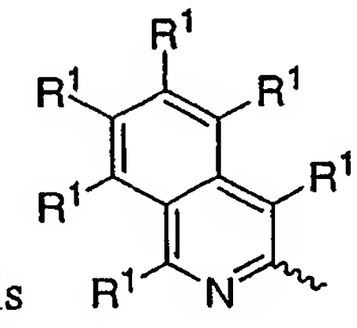
each instance of R^1 is selected independently from the group consisting of halogen, alkyl, alkenyl, alkynyl, hydroxyl, alkoxyl, acyl, acyloxy, acylamino, silyloxy, amino, nitro, sulfhydryl, alkylthio, imino, amido, phosphoryl, phosphonate, phosphine, carbonyl, carboxyl, carboxamide, anhydride, silyl, thioalkyl, alkylsulfonyl, arylsulfonyl, selenoalkyl, ketone, aldehyde, ester, heteroalkyl, cyano, guanidine, amidine, acetal, ketal, amine oxide, aryl, heteroaryl, aralkyl, heteroaralkyl, azido, aziridine, carbamoyl, epoxide, hydroxamic acid, imide, oxime, sulfonamide, thioamide, thiocarbamate, urea, thiourea, and $-(CH_2)_d-R_{80}$.

64. The compound of claim 63, wherein m is 1.

65. The compound of claim 63, wherein n is 1.

66. The compound of claim 63, wherein R is hydrogen.

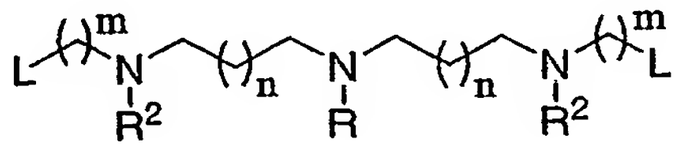
67. The compound of claim 63, wherein L is  ; and R^1 is hydrogen.

68. The compound of claim 63, wherein L is  ; R^1 is hydrogen; m is 1; n is 1; and R is hydrogen.

69. The compound of claim 63, wherein said compound is complexed with a radionuclide.

70. The compound of claim 63, wherein said compound is complexed with a radionuclide, wherein said radionuclide is technetium or rhenium.

71. A compound represented by **H**:



H

wherein

R is hydrogen, halogen, alkyl, alkenyl, alkynyl, hydroxyl, alkoxyl, acyl, acyloxy, acylamino, silyloxy, amino, nitro, sulfhydryl, alkylthio, imino, amido, phosphoryl, phosphonate, phosphine, carbonyl, carboxyl, carboxamide, anhydride, silyl, thioalkyl, alkylsulfonyl, arylsulfonyl, selenoalkyl, ketone, aldehyde, ester, heteroalkyl, cyano, guanidine, amidine, acetal, ketal, amine oxide, aryl, heteroaryl, aralkyl, heteroaralkyl, azido, aziridine, carbamoyl, epoxide, hydroxamic acid, imide, oxime, sulfonamide, thioamide, thiocarbamate, urea, thiourea, or $-(CH_2)_d-R_{80}$;

R^2 represents a moiety comprising a neutral or anionic Lewis base, H, alkyl, hydroxyalkyl, alkoxyalkyl, aminoalkyl, thioalkyl, alkenyl, alkynyl, aryl, heteroaryl, aralkyl, heteroaralkyl, acyl, aminoacyl, hydroxyacyl, thioacyl, (amino)alkoxycarbonyl,

(hydroxy)alkoxycarbonyl, (amino)alkylaminocarbonyl, (hydroxy)alkylaminocarbonyl, $-CO_2H$, $-(CH_2)_d-R_{80}$, or an amino acid radical;

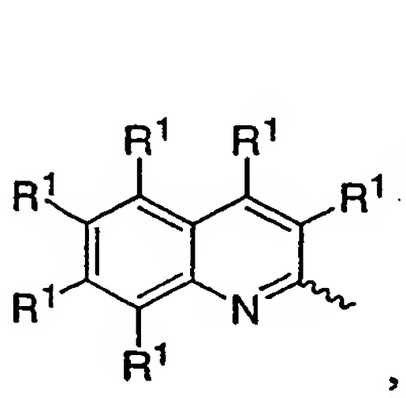
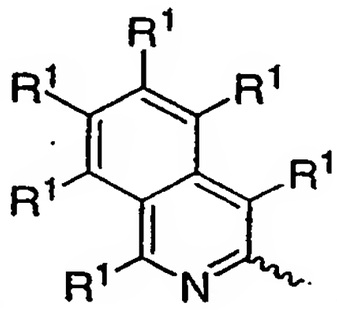
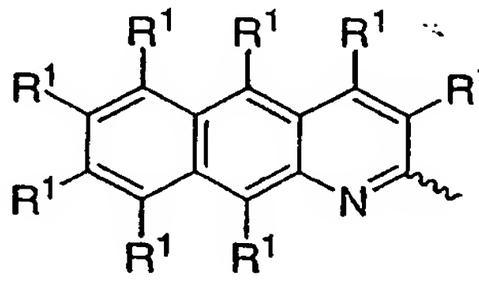
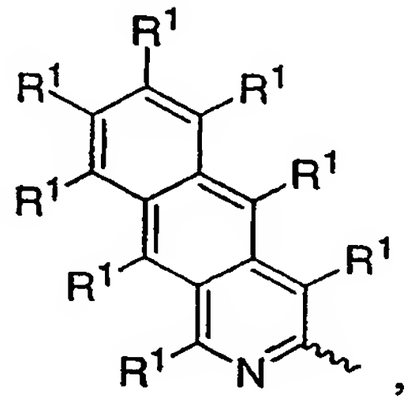
R_{80} is independently for each occurrence carboxaldehyde, carboxylate, carboxamido, alkoxycarbonyl, aryloxycarbonyl, ammonium, aryl, heteroaryl, cycloalkyl, cycloalkenyl, heterocyclyl, polycyclyl, amino acid, peptide, saccharide, ribonucleic acid, (deoxy)ribonucleic acid, or a ligand for a G-protein-coupled receptor;

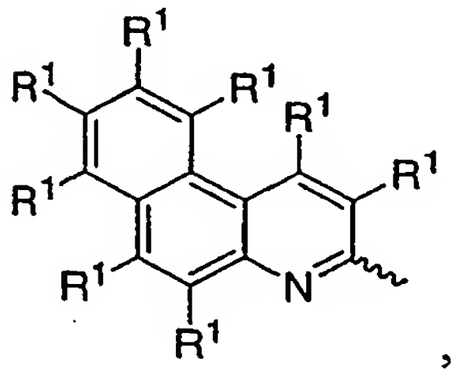
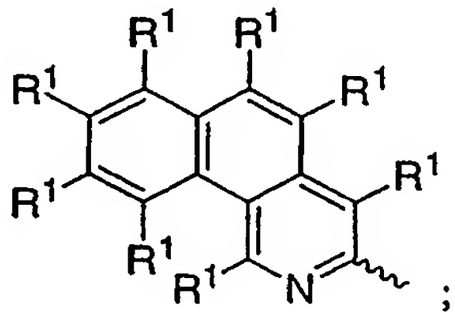
d is an integer in the range 0 to 12 inclusive;

m is an integer in the range 0 to 6 inclusive;

n is an integer in the range 0 to 6 inclusive;

L is independently for each occurrence selected from the group consisting of


, 
, 
, 
,


, and 
; and

each instance of R^1 is selected independently from the group consisting of halogen, alkyl, alkenyl, alkynyl, hydroxyl, alkoxyl, acyl, acyloxy, acylamino, silyloxy, amino, nitro, sulfhydryl, alkylthio, imino, amido, phosphoryl, phosphonate, phosphine, carbonyl, carboxyl, carboxamide, anhydride, silyl, thioalkyl, alkylsulfonyl, arylsulfonyl, selenoalkyl, ketone, aldehyde, ester, heteroalkyl, cyano, guanidine, amidine, acetal, ketal, amine oxide, aryl, heteroaryl, aralkyl, heteroaralkyl, azido, aziridine, carbamoyl, epoxide, hydroxamic acid, imide, oxime, sulfonamide, thioamide, thiocarbamate, urea, thiourea, and $-(CH_2)_d-R_{80}$.

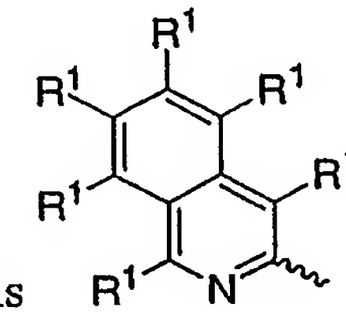
72. The compound of claim 71, wherein m is 1.

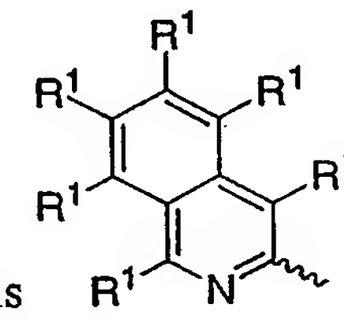
73. The compound of claim 71, wherein n is 1.

74. The compound of claim 71, wherein R is hydrogen or $-(CH_2)_d-R_{80}$.

75. The compound of claim 71, wherein R^2 is a moiety comprising an anionic Lewis base

76. The compound of claim 71, wherein R^2 is a carboxylate, thiolate, or phenolate

77. The compound of claim 71, wherein L is  ; and R^1 is hydrogen.

78. The compound of claim 71, wherein L is  ; R^1 is hydrogen; m is 1; n is 1; R is hydrogen or $-(CH_2)_d-R_{80}$; and R^2 is a carboxylate, thiolate, or phenolate.

79. The compound of claim 71, wherein said compound is complexed with a radionuclide.

80. The compound of claim 71, wherein said compound is complexed with a radionuclide, wherein said radionuclide is technetium or rhenium.

81. A formulation, comprising a compound according to any of claims 1-80; and a pharmaceutically acceptable excipient.

82. A method of imaging a region in a patient, comprising the steps of: administering to a patient a diagnostically effective amount of a compound of claim 2, 3, 5, 6, 27, 28, 30, 31, 53, 54, 61, 62, 69, 70, 79 or 80; and obtaining an image of said region of said patient.

83. The method of claim 82, wherein said region of said patient is the head or thorax.

84. A method of preparing a peptide conjugate incorporating a compound of claim 16, 25, 43 or 52, wherein the peptide conjugate is prepared using solid phase synthetic techniques.